

## ABSTRACT

A primer set used to screen a polynucleotide sample to detect and identify variants in the Cytochrome P450 isoenzyme 2D6 (CYP2D6) gene. A method of screening a polynucleotide sample to detect and identify the presence of one or more than one variant in the CYP2D6 gene in the sample. A method of predicting the potential for altered metabolism of a substance, including one or more than one pharmaceutical drug, by a first individual compared to a second control individual, where the substance is metabolized by the CYP2D6 isoenzyme, and where the second control individual is homozygous for the wild type allele of the CYP2D6\*1, SEQ ID NO:1.

A method of screening a population to detect and identify the presence of one or more than one variant in the CYP2D6 gene. A purified or isolated variant of SEQ ID NO:1. A purified or isolated variant of SEQ ID NO:3.